What is claimed is:

1. In a touch-input computer and related supported display employing touch force location measurements, a method of eliminating [the] errors [that may be] introduced into force and/or torque measurements by undesired inertial interference motions of one or more of the support, mechanical system of the display and/or force measuring apparatus itself, that comprises, sensing one or more components of force and/or torque applied to the display by touch forces to provide force and/or torque measurements uncorrected for inertial interference motion effects that [may] arise; sensing lineal and/or rotational acceleration of the display in response to such inertial interference motions; and correcting the uncorrected force and/or torque measurements in response to the acceleration sensing to reflect substantial elimination from the measurements of the effects of such inertial interference.

2. A method as claimed in claim 1 and in which said uncorrected force measurements are made and said acceleration is sensed for all relevant degrees of freedom

of motion in a plurality of respective channels, and different linear combinations of the acceleration-sensing channels are added in turn to each channel of force measurement, with coefficients of combinations chosen such that the resulting sums reflect the desired force measurements substantially free of inertial motion interference errors.

3. A method as claimed in claim 2 and in which time derivatives including at least a set of the second order derivatives of the uncorrected force measurements are derived and entered in different linear combinations of each order in turn in each channel of force measurement further to correct the same.

4. A method as claimed in claim 3 and in which calibration is effected from the supported display by intentionally moving and disturbing the same in various ways while the touch force ultimately to be measured is allowed to remain at zero, in order to generate a correction matrix the elements of which comprise the desired coefficients of combination to achieve the corrections of the force measurements in each channel.

5. A method as claimed in claim 4 and in which coefficients of combination for the correcting channels are derived [in situ] at the display.

6. In a touch-input computer and related supported display employing touch force location measurements, a method of eliminating [the] errors [that may be] introduced into force and/or torque measurements by undesired inertial interference motions of one or more of the support, mechanical systems of the display and/or force measuring apparatus itself, that comprises, sensing one or more components of force and/or torque applied to the display by touch forces to provide a plurality of channels of force and/or torque measurements uncorrected for inertial interference effects that [may] arise; deriving time derivatives including at least a set of the second order derivatives of the uncorrected force measurementsand entering the same in different linear combinations of each order in turn in each channel of uncorrected force measurement, with coefficients of combination chosen such that the resulting sums reflect the desired force measurements substantially free of inertial motion interference errors.

itself, that comprises sensing two or more components of force and/or torque applied along corresponding input channels to the system by forces acting thereupon to provide force and/or torque measurements uncorrected for inertial interference motion effects that arise; correcting at least one channel of force measurement by applying corrections derived from other input channels of the uncorrected force measurements, such that the output of said one channel of force measurement is rendered substantially free of inertial interference errors.

17. A method as claimed in claim 11 and in which the deriving and applying of corrections is mathematically substantially equivalent to deriving corrections which are time derivatives, including in at least one instance the second time derivative of some or all of the uncorrected force measurements or linear combinations of the same, and from an uncorrected force measurement of another channel to yield said one channel of force measurement which is substantially free of inertial interference.

18. Within a method for measuring aspects of the location of application of a force to an object, a method of measuring force and/or torque applied to the object that comprises, sensing two or more components of force and/or torque applied to the object by forces acting thereupon, to provide force and/or torque measurements uncorrected for inertial interference motion effects that arise; correcting at least one force measurement by applying corrections derived from other uncorrected force measurements, such that said one force measurement is rendered substantially free of inertial interference errors.

measuring apparatus itself, that comprises, sensing one or more components of force and/or torque applied to the system by forces acting thereupon to provide force and/or torque measurements uncorrected for inertial interference motion effects that may arise; sensing lineal and/or rotational acceleration of the system in response to such inertial interference motions; and correcting the uncorrected force and/or torque measurements in response to the acceleration sensing to reflect elimination from the measurements of the effects of such inertial interference.

9. A method as claimed in claim 8 and in which said uncorrected force measurements are made and said acceleration is sensed for all relevant degrees of freedom of motion in a plurality of respective channels, and different linear combinations of the acceleration-sensing channels are added in turn to each channel of force measurement, with coefficients of combinations chosen such that the resulting sums reflect the desired force measurements substantially free of inertial motion interference errors.

10. A method as claimed in claim 9 and in which time derivatives including at least a set of the second order derivatives of the uncorrected force measurements are derived and extended in different linear combinations of each order in turn in each channel of force measurement further to correct the same.

11. A method as claimed in claim 10 and in which calibration is effected ~~from~~ the supported ~~display~~ by intentionally moving and disturbing the same in various ways while the touch force ultimately to be measured is allowed to remain at zero, in order to generate a correction matrix the elements of which comprise the desired coefficients of combination to achieve the corrections of the force measurements in each channel.

12. A method as claimed in claim 11 and in which coefficients of combination for the correcting channels are derived in situ at the display.

13. A method of measuring force and/or torque to be applied to a ~~mechanical~~ touch panel display system, including, where desired objects associated therewith and portions of forces measuring apparatus itself, that comprises, sensing one or more components of force and/or torque applied to the system by deliberate forces acting thereupon to provide force and/or torque measurements uncorrected by inertial interference motion effects that [may] arise; deriving time derivatives including at least a set of the second order derivatives of the uncorrected force measurements and ~~entering~~ inserting the same in different combinations of each order in turn ~~in~~ into each channel of uncorrected force measurement, with coefficients of combination chosen such that the resulting sums reflect the desired force measurements substantially free of inertial motion interference errors.

14. A method of measuring force and/or torque to be applied to a ~~mechanical system~~ touch panel display system, including, where desired objects associated therewith and portions of force measuring apparatus itself, that comprises, sensing one or more components of force and/or torque applied to the

system by deliberate forces acting thereupon to provide force and/or torque measurements uncorrected by inertial interference motion effects that may arise; ~~deriving time effects that may arise~~; intentionally moving and disturbing the system in various ways while the said deliberate forces ultimately to be measured are not applied and are allowed to remain at zero,, in order to generate measurements that enable calibration of the system that renders the same less prone to force measurement errors due to motions of the type created by said moving and disturbing.

15. In a touch-input computer and related supported display employing touch force location measurements apparatus for eliminating the errors that may be introduced into force and/or torque measurements by undesired inertial interference motions of one or more of the support, mechanical system of the display and/or force measuring apparatus itself, having, in combination, means for sensing one or more components of force and/or torque applied to the display by touch forces to provide force and/or torque measurements uncorrected for inertial interference motion effects that may arise; means for sensing lineal

and/or rotational acceleration of the display in response to such inertial interference motions; and means for correcting the uncorrected force and/or torque measurements in response to the acceleration sensing to reflect substantial elimination from the measurements of the effects of such inertial interference.

16. Apparatus as claimed in claim 15 and in which means is provided for making said uncorrected force measurements and sensing said acceleration for all relevant degrees of freedom of motion in a plurality of respective channels, and different linear combinations of the acceleration-sensing channels in turn to each channel of force measurement, with coefficients of combinations chosen such that the resulting sums reflect the desired force measurements substantially free of inertial motion interference errors.

17. Apparatus as claimed in claim 16 and in which means is provided for deriving time derivatives including at least a set of the second order derivatives of the

uncorrected force measurements and for entering the same in different linear combinations of each order in turn in each channel of force measurement further to correct the same.

18. Apparatus as claimed in claim 17 and in which calibration means is provided comprising means by intentionally moving and disturbing the supported display in various ways while the touch force ultimately to be measured is allowed to remain at zero, in order to generate a correction matrix the elements of which comprise the desired coefficients of combination to achieve the corrections of the force measurements in each channel.

19. A method as claimed in claim 18 and in which means for deriving coefficients of combination for the correcting channels is operated [in situ] at the display.

20. In a touch-input computer and related supported display employing touch force location measurements, apparatus for eliminating [the] errors [that may be] introduced into force and/or torque measurements by undesired inertial

interference motions of one or more of the support, mechanical systems of the display and/or force measuring apparatus itself, having, in combination, means for sensing one or more components of force and/or torque applied to the display by touch forces to provide a plurality of channels of force and/or torque measurements uncorrected for inertial interference effects that [may] arise; means for deriving time derivatives including at least a set of the second order derivatives of the uncorrected force measurements and entering the same in different linear combinations of each order in turn in each channel of uncorrected force measurement, with coefficients of combination chosen such that the resulting sums reflect the desired force measurements substantially free of inertial motion interference errors.

21. In a touch-input computer and related supported display employing touch force location measurements, apparatus for eliminating [the] errors [that may be] introduced into force and/or torque measurements by undesired inertial interference motions of one or more of the support, mechanical systems of the display and/or force measuring

apparatus itself, having, in combination, means for sensing one or more components of force and/or torque applied to the display by touch forces to provide a plurality of channels of force and/or torque measurements uncorrected for inertial interference effects that [may] arise; means for intentionally moving and disturbing the supported display in various ways while the touch force ultimately to be measured is not applied and is allowed to remain at zero, in order to generate measurements that enable calibration of the supported display system that renders the same less prone to force measurement errors due to motions of the type created by said moving and disturbing.

22. Apparatus for measuring force and/or torque to be applied to a ~~mechanical~~ touch panel display system, including, where desired, objects associated therewith and portions of forcemeasuring apparatus itself, having, in combination, means for sensing one or more components of force and/or torque applied to the system by forces acting thereupon to provide force and/or torque measurements uncorrected for

inertial interference motion effects that may arise; means for sensing lineal and/or rotational acceleration of the system in response to such inertial interference motions; and means for correcting the uncorrected force and/or torque measurements in response to the acceleration sensing to reflect elimination from the measurements of the effects of such inertial interference.

23. Apparatus as claimed in claim 22 and in which said uncorrected force measurements are made and said acceleration is sensed for all relevant degrees of freedom of motion in a plurality of respective channels, and means is provided for adding different linear combinations of the acceleration-sensing channels in turn to each channel of force measurement, with coefficients of combinations chosen such that the resulting sums reflect the desired force measurements substantially free of inertial motion interference errors.

24. Apparatus as claimed in claim 23 and in which means is provided to derive time derivatives including at least

a set of the second order derivatives of the uncorrected force measurements and to enter the same in different linear combinations of each order in turn in each channel of force measurement further to correct the same.

25. Apparatus as claimed in claim 24 and in which calibration means is provided including means for intentionally moving and disturbing the same in various ways while the touch force ultimately to be measured is allowed to remain at zero, with means for generating a correction matrix the elements of which comprise the desired coefficients of combination to achieve the corrections of the force measurements in each channel.

26. Apparatus as claimed in claim 25 and in which means is provided for deriving the coefficients of combination for the correcting channels [in situ] at the display.